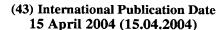
(12) INTERNATIONAL A



(19) World Intellectual Property Organization

International Bureau



PCT

(10) International Publication Number WO 2004/031709 A3

(51) International Patent Classification7:

G08B 23/00

WO 2004/031709

(21) International Application Number:

r**:**

]

PCT/US2003/031326

(22) International Filing Date: 2 October 2003 (02.10.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/415,373

2 October 2002 (02.10.2002) US

(71) Applicant and

(72) Inventor: KAIN, Aron, Zev [US/US]; 1 Jodi Court, Wesley Hills, NY 10952 (US).

(74) Agents: HELFGOTT, Samson et al.; Katten, Muchin, Zavis, Rosenman, 575 Madison Avenue, New York, NY 10022-2585 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,

CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

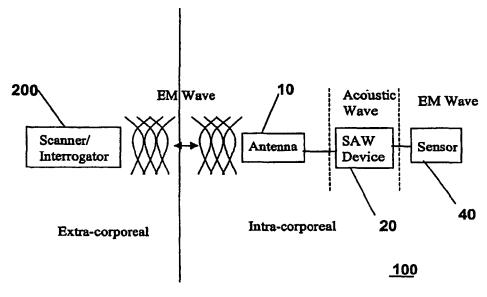
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 22 July 2004

[Continued on next page]

(54) Title: WIRELESS SYSTEM FOR MEASURING PRESSURE AND FLOW IN TUBES



(57) Abstract: A remote sensor (100) is remotely placed within a vessel containing a fluid in order to sense a pressure generated by the fluid. The sensor includes an antenna (10) for capturing an externally-generated interrogation signal and for transmitting a response signal, a response circuit (20, 30) coupled to the antenna (10) for receiving the interrogation signal and for generating the response signal, and a sensor element (40) coupled to the response circuit. One or more electrical characteristics of the response circuit (20, 30) change in relation to the sensed pressure, thereby determining measurable characteristics of the response signal. Importantly, the response circuit (20, 30) operates to delay the transmission of the response signal to a time separated from and following transmission of artifacts of the interrogation signal.





For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Interna	application No.
PCT/US03/	31326

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : G08B 23/00				
US CL : 340/573.1				
According to International Patent Classification (IPC) or to both national classification and IPC				
B. FIEL	DS SEARCHED			
Minimum documentation searched (classification system followed by classification symbols) U.S.: 340/573.1, 573.4, 572.8, 340.06, 825.17; 73/702, 703				
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched None				
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EAST				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category *	Citation of document, with indication, where a	Relevant to claim No.		
A	US 6,346,886 B1 (DE LA HUERGA) 12 February 2	1-23		
A	US 5,904,708 A (GOEDEKE) 18 May 1999 (18.05.	1-23		
Further	documents are listed in the continuation of Box C.	See patent family annex.		
	pecial categories of cited documents:	"T" later document published after the international f'ing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention		
	defining the general state of the art which is not considered to be lar relevance			
"E" earlier ap	plication or patent published on or after the international filing date	"X" document of particular relevance; the considered novel or cannot be considered to the document is taken alone		
	which may throw doubts on priority claim(s) or which is cited to the publication date of another citation or other special reason (as	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art		
"O" document	referring to an oral disclosure, use, exhibition or other means			
	published prior to the international filing date but later than the ate claimed	"&" document member of the same pate	nt family	
Date of the actual completion of the international search		Date of mailing of the international search report 0 3 JUN 2004 Authorized officer Dideless to the search report		
11 May 2004 (11.05.2004)		Authorized officer	<u> </u>	
Mai Con P.O	ailing address of the ISA/US il Stop PCT, Attn: ISA/US nmissioner for Patents 0. Box 1450 xandria, Virginia 22313-1450	William Oen Telephone No. 571-272-2186	Jutonba	
Facsimile No. (703)305-3230				